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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

MELLER, MICHAEL V

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 06/17/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/811,766

Applicant(s)

APPU RAO ET AL.

Examiner

Michael V. Meller

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 148,600 (EP) or Thomas et al. in view of Satoh et al. and further in view of Chigurapati et al. or Olsen.

EP teaches that defatted soybean flour is hydrolyzed with a protease at 49-53°C and at a pH of 3.0 to 8.5, see pages 3 and 6.

Thomas teaches that defatted soy flour is hydrolyzed with a protease at 37-42°C for three hours, see examples.

The references do not teach adding papain to the reaction mixture or that the protease specifically comes from *Aspergillus*.

Satoh teaches that papain is a well known protease which is used in methods of making protein hydrolyzates by hydrolyzing a defatted soy flour, see col. 1, and cols, 5-6.

Chigurapati et al. and Olsen teach that the protease used routinely can be extracted from *Aspergillus* to make the claimed invention.

It would have been obvious for one of ordinary skill in the art to add papain to the reaction mixture since Satoh establishes that papain is routinely used to make protein hydrolyzates by hydrolyzing a defatted soy flour with the papain. Thus, to add the papain is simply an added benefit to the enzyme hydrolysis process.

The adjustment of particular conventional working conditions (e.g., determining result effective amounts of the ingredients beneficially taught by the cited references or specific times of hydrolysis, especially within the broad ranges instantly claimed) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, this type of modification would have been well within the purview of the skilled artisan and no more than an effort to optimize results.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chigurapati et al. or Olsen taken with Satoh et al.

Chigurapati teaches that defatted soy flour can be hydrolyzed with a protease from *Aspergillus* at pH 7 and at a temp of 45-60°C, see col. 1, cols. 5-6.

Olsen teaches defatted soy flour is hydrolyzed by a protease from *Aspergillus* at pH 8 and at a temp around 50 °C, see Figure 1, col. 1, col. 4, , col. 5, example 1.

The references do not teach adding papain to the reaction mixture.

Satoh teaches that papain is a well known protease which is used in methods of making protein hydrolyzates by hydrolyzing a defatted soy flour, see col. 1, and cols, 5-6.

It would have been obvious for one of ordinary skill in the art to add papain to the reaction mixture since Satoh establishes that papain is routinely used to make protein hydrolyzates by hydrolyzing a defatted soy flour with the papain. Thus, to add the papain is simply an added benefit to the enzyme hydrolysis process.

The adjustment of particular conventional working conditions (e.g., determining result effective amounts of the ingredients beneficially taught by the cited references or specific times of hydrolysis, especially within the broad ranges instantly claimed) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, this type of modification would have been well within the purview of the skilled artisan and no more than an effort to optimize results.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalboge et al., Edens et al., or Schoenmaker et al. in view of Satoh et al.

Schoenmaker, Dalboge and Edens all teach that defatted soy flour is hydrolyzed by a protease at the claimed temp. ranges and pH ranges and that the protease comes from *Aspergillus*.

The references do not teach adding papain to the reaction mixture.

Satoh teaches that papain is a well known protease which is used in methods of making protein hydrolyzates by hydrolyzing a defatted soy flour, see col. 1, and cols, 5-6.

It would have been obvious for one of ordinary skill in the art to add papain to the reaction mixture since Satoh establishes that papain is routinely used to make protein hydrolyzates by hydrolyzing a defatted soy flour with the papain. Thus, to add the papain is simply an added benefit to the enzyme hydrolysis process.

The adjustment of particular conventional working conditions (e.g., determining result effective amounts of the ingredients beneficially taught by the cited references or specific times of hydrolysis, especially within the broad ranges instantly claimed) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, this type of modification would have been well within the purview of the skilled artisan and no more than an effort to optimize results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 703-308-4230. The examiner can normally be reached on Monday thru Friday: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 703-308-4743. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Michael V. Meller  
Examiner  
Art Unit 1651

MVM  
June 6, 2002